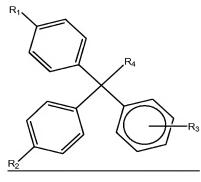
This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

 (Currently Amended) A method of treating patients who have diseases characterized bone loss comprising the step of administering to said patient an amount of TRANCE/RANK inhibitors effective to inhibit osteoclastogenesis and/or osteoclast function, wherein said TRANCE/RANK inhibitor is a compound having the Formula I



Formula I

wherein:

R₁, and R₂ are, independently, selected from the group consisting of -H, - OCH₃, - CH₂CH₃, -t-butyl, 3-carboxy-4-chlorophenylamino, -N-(CH₂CH₂OH)₂, and -O(O)C-Ph;

R₃ is selected from the group consisting of -H, ethyl, -OCH3, -C1, Br, F, 3carboxy-4 chlorophenylamino, -N-(CH₂CH₂OH)₂, -t-butyl, and -OC(O)-Ph, and is not limited to attachment at any certain position on the phenyl ring to which it is attached; and

R₄ is selected from the group consisting of -Br,-Cl, and -F.

2. (Cancelled)

3. (Original) The method of claim 2 wherein R₃ is attached at either the 1 or 4 position of the phenyl ring.

4. (Previously Presented) The method of claim 1 wherein said TRANCE/RANK inhibitor is a compound having the Formula I wherein:

R₁, R₂, and R₃ are -OCH₃, R₃ is attached at the 4 position, R₄ is -Cl;

R₁, and R₂ are methyl, R₃ is ethyl, attached at the 4 position, R₄ is -Cl;

R₁, and R₂ are -OCH₃, R₃ is -Cl, attached at the 2 position, R₄ is -Cl;

R₁, and R₂ are -OCH₃ and R₃ is H, R₄ is -Cl;

R₁, is H, R₂ and R₃ are 3-carboxy-4-chlorophenylamino, and R₃ is attached at the 4 position, R₄ is -Cl;

R₁ and R₂ are -N(CH₂CH₂OH)₂, R₃ is Cl, attached at the 4 position, R₄ is -Cl;

R₁, R₂, and R₃ are t-butyl, R₃ is attached at the 4 position, R₄ is -Cl;

R₁, is -OCH₃, R₂ and R₃ are H, R₄ is Cl; or

 R_1 , R_2 , and R_3 are benzoate, R_3 is attached at the 4 position, R_4 is Br.

5. (Currently amended) The method of claim 1 wherein said TRANCE/RANK inhibitor is selected from the group consisting of:

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6. (Withdrawn/Currently amended) The method of claim 1 wherein said TRANCE/RANK inhibitor is a compound having the Formula II

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$$\mathbb{R}_{3}$$
 \mathbb{R}_{3}
 \mathbb{R}_{4}
 \mathbb{R}_{2}

Formula II

wherein:

II-A

R₁ is selected from the group consisting of –diphenylchloromethyl, -di(4chlorophenyl)chloromethyl, and 4-(diphenylchloromethyl)phenyl; and R₂, R₃, R₄ are independently selected from the group consisting of -Br, -Cl, and -F.

- 7. (Withdrawn) The method of claim 6 wherein R₂, R₃, and R₄ are each -Cl.
- 8. (Withdrawn/Currently amended) The method of claim 1 wherein the TRANCE/RANK inhibitor is selected from the group consisting of compounds:

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9. (Withdrawn/Currently amended) The method of claim 1 wherein said inhibitor is a compound having Formula III

Formula III

wherein:

 R_1 = (NO₂)₂,O(CO)CH₃, OH, O(CO)CH₃, O(CO)(CH₂)₂COOH, O(CO)CH₂Br, O(CO)CH₂CI, O(CO)CH₂N(CH₃)₃, or OC₈H₉O;

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R2= CH₂O(N0₂), CHO, CH₂O(N0₂), CN, CH₃, COOH, CHNOH, CH₂O(CO)(CH₂)₂COOH, CHN(NH)CONH₂, CHN(NH)C₆H₅, CHN(CH₂)C₆H₅, CH₂N(CH₂)₂OH, CH₂NC₆H₅, or CH₂N(NH)CSNH₂;

 $R_3 = OH$, or H;

 $R_4 = CH_3$;

 $R_5 = OH;$

 $R_6 = C_4H_3O_2$, $N(NHCO)C_6H_4Cl$, $N(NHCO)C_6H_4F$, COOH, O, $COCH_3$, $CH(CH_3)(CH_2)_2COOH$, $CH(CH_3)(CH_2)_2COOCH_3$, $O(CO)C_6H_5$, or OH;

 $R_7 = O(CO)CH_2N(CH_3)_3$, or $O(CO)CH_3$;

 $R_8 = OH;$

 $R_9 = O$, or OH; and Rio = O

 $R_{10} = O$.

10. (Withdrawn/currently amended) The method of claim 1 wherein the inhibitor is selected from the group consisting of compounds III-1 to III-31:

III-1	H ₂ CH ₂ CH ₃ CH ₂ CH ₂ CH ₃ CH ₃ CH ₂ CH ₃
III-2	H ₂ C CH ₃ H ₃ CH ₃ H ₄ CH H ₅ CH H ₅ CH H ₆ CH H ₇ C
III-3	$\begin{array}{c} O \\ O \\ O \\ O \\ H_3 \\ C \\ H_2 \\ C \\ H_3 \\ C \\ H_3 \\ C \\ H_2 \\ C \\ H_3 \\ C \\ H_3 \\ C \\ H_2 \\ C \\ H_3 \\ C \\ H_4 \\ C \\ H_5 \\ C \\ C \\ H_5 \\ C \\ C \\ H_5 \\ C \\ $

H ₂ CH ₃ H ₂ CH ₃ CH ₂ CH ₂ H ₂ CH ₂ H ₂ CH ₂ CH ₃ CH
H ₂ CH ₃ H ₃ CH ₃ H ₄ CH ₃ H ₄ CH ₃ H ₄ CH ₃ CH

III-9	H ₂ C OH CH ₃ CH ₃ CH ₂ CH ₃ OH CH ₃ OH CH ₃ OH
III-10	H ₂ CH H ₂ CH ₂ H ₃ CH H ₂ CH ₂ H ₄ CH H ₂ CH ₂ H ₁ CH ₂ CH ₂ H ₂ CH ₂ CH ₂ H ₃ CH H ₂ CH ₂ CH ₂ H ₄ CH ₂

III-11	
III-12	H ₃ CH ₃ H ₄ CH ₃ H ₄ CH ₂ H ₄ CH ₂ H ₄ CH ₂ CH ₂ CH ₂ CH ₃ CH ₂ CH ₃

<u>III-16</u>	$\begin{array}{c} H_{3C} \\ H_{3C$
III-17	H ₂ C CH ₂ H ₃ C CH ₃ H ₄ C CH ₃ H ₄ C CH ₃ H ₅ C CH ₃ H ₄ C CH ₃ H ₅ C
III-18	H ₃ CH ₃ C

III-19	H ₂ N NH H ₂ CH ₃ CH H ₃ CH ₂ CH ₂ CH ₃ CH
<u>III-20</u>	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
III-21	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

III-22	HO CH ₂ H ₂ CH ₂ H ₃ CH ₃ CH ₂ CH ₂ H ₄ CH ₂ CH ₂ H ₄ CH ₂ CH ₂ H ₄ CH ₂
III-23	H ₃ C CC CH ₃ H ₃ C CH ₄ CH ₂ CH
III-24	H ₂ N NH H ₃ CH ₃ CH H ₂ C H ₄ CH ₂ CH ₂ H ₂ C H ₄ CH ₂ H ₃ C CH ₂ H ₄ C CH ₂ H ₄ C CH ₂ H ₄ C CH ₂ H ₅ C CH ₂ H ₅ C CH ₂ H ₅ C CH H ₅ C CH H ₆ C CH ₂ CH H ₇ C CH H ₈ C CH

<u>III-25</u>	$\begin{array}{c c} & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ &$
III-26	$\begin{array}{c c} & & & & \\ & & & & \\ & & & & \\ & & & & $
<u>III-27</u>	$\begin{array}{c c} & H_3C \\ & H_3C \\ & CH_3 \\ & HC \\ & H_2C \\ & H_3C \\ & HC \\ & H_3C $

<u>III-28</u>	$\begin{array}{c} H_{3}C \\ \downarrow \\ H_{2}C \\ \downarrow \\ H_{3}C \\ \downarrow $
<u>III-29</u>	$\begin{array}{c c} H_2 & CH_3 \\ H_2 & CH_2 \\ \hline \\ H_3 & H \end{array}$
<u>III-30</u>	H ₂ CH ₃ CH ₂ CH ₂ H ₂ CH ₃ CH ₂ H ₃ CH ₃ CH ₂ H ₄ CH ₃ CH ₂ H ₅ CH ₂ CH ₂
III-31	H ₂ CH ₃ OH H ₂ CH ₃ OH H ₃ CH ₃ CH ₂ CH ₂ CH ₂ H ₃ C CH ₂ H ₃ C CH ₂ CH ₃ H ₂ C CH ₂ H ₃ C CH ₂ H ₃ C CH ₂ CH ₂ CH ₂ CH ₂ CH ₂ CH ₂ CH ₃ CH ₂ CH ₂ CH ₂ CH ₃ CH ₃ CH ₃ CH ₂ CH ₃ CH

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11. (Withdrawn/currently amended) The method of claim 1 wherein said inhibitor is a compound having Formula IV

Formula IV

wherein:

IV-1

$$R1 = O(CO)(CH_2)_2COOH$$
, or $O(CO)CH_2Br$; and

$$R2 = O(CO)(CH_2)_2COOH$$
, or $O(CO)CH_2Br$.

12. (Withdrawn/currently amended) The method of claim 1 wherein the inhibitor is selected from the group consisting of compounds

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13. (Withdrawn/currently amended) The method of claim 1 wherein said inhibitor is a compound having Formula V

Formula V

wherein:

IV-2

 $R_1 = O$, OH, or O(CO)CH₃;

 $R_2 = O(CO)CH_3$, OH, $CO(CH_3)$, or $CO(CH_2)O(CO)CH_3$;

 $R_3 = CH_3$, or OH; and

 $R_4 = O(CO)CH_2C_6H_4I$, or CH_3 .

14. (Withdrawn/currently amended) The method of claim 1 wherein the inhibitor is selected from the group consisting of compounds

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$$\begin{array}{c|c} & & \text{OH} \\ & & \text{H}_2 & \text{CH}_3 \\ & & \text{H}_2 & \text{CH}_3 \\ & & \text{H}_2 & \text{CH}_3 \\ & & \text{H}_2 & \text{CH}_2 \\ & & \text{H}_3 & \text{H} & \text{H}_2 \\ & & \text{H}_3 & \text{H} & \text{H}_2 \\ \end{array}$$

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15. Canceled

16. (Withdrawn/Currently amended) The method of claim 1 wherein the inhibitor is selected from the group consisting of compounds

$$\begin{array}{c} H_{2}C \\ H_{2} \\ CH_{3} \\ CH_{2} \\ CH_{2} \\ CH_{2} \\ CH_{2} \\ CH_{2} \\ CH_{2} \\ CH_{3} \\ CH_{4} \\ CH_{3} \\ CH_{3} \\ CH_{4} \\ CH_{3} \\ CH_{4} \\ CH_{5} \\ CH_{5}$$

VI-[[11]] <u>2</u>

17. (Withdrawn/currently amended) The method of claim 1 wherein the inhibitor is selected from the group consisting of compounds

VII

VIII _

IX

X

XI

PATENT PATENT

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Claims 18-43: (Cancelled)

XII